



Matthew Rodriquez
Secretary for
Environmental Protection

Department of Toxic Substances Control

Deborah O. Raphael, Director 5796 Corporate Avenue Cypress, California 90630



October 8, 2012

Mr. Michael Evans (m.evans@associatedplating.com)
Associated Plating Co., Inc.
9636 Ann Street
Santa Fe Springs, California 90670

APPROVAL OF SOIL GAS INVESTIGATION REPORT, ASSOCIATED PLATING COMPANY, 9636 ANN STREET, SANTA FE SPRINGS, LOS ANGELES COUNTY (SITE CODE: 400891)

Dear Mr. Evans:

The Department of Toxic Substances Control (DTSC) reviewed the Soil Gas Investigation Report (Report), prepared by Worley Parsons, dated September 4, 2012 and received on September 6, 2012. The Report presents the results of the May 2012 soil gas investigation at the Associated Plating Company, Inc. (APC) site (Site).

The 1.25-acre Site consists of an approximately 17,000 square foot plating facility. The plating facility specializes in the use of fused tin and tin/lead alloys using electro and electroless plating. The Site contains two hazardous waste units authorized by the DTSC on August 4, 1993 under Permit by Rule.

On December 31, 1996, pursuant to Health and Safety Code section 25200.14, APC submitted a Phase I Environmental Assessment and Limited Environmental Compliance Assessment to DTSC. On March 9, 2001, DTSC identified five solid waste management units that required further investigation. Based on subsequent investigations in November 2001 and February 2002, DTSC and APC entered into a Corrective Action Consent Agreement on January 5, 2004. The Site was subsequently separated into three operable units (OUs): OU1 consisted of soils above a buried concrete pad at 7 ft bgs; OU2 consisted of soils and the first groundwater zone from 7 to 70 ft bgs; and OU3 consisted of off-site soils and the groundwater zone.

In January 2005, APC submitted a Facilities Investigation Report for OU1 (FI-OU1) documenting soil and soil gas sampling results per a DTSC-approved Facilities Investigation Workplan. On June 28, 2005, DTSC approved the revised FI-OU1 Report and requested a workplan for OU2. On February 27, 2006, DTSC approved the

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January 2006 revised FI Workplan for OU2. APC submitted an FI Report for OU2 dated June 30, 2006. DTSC approved the FI-OU2 Report on June 27, 2007. During this time, APC submitted a draft Corrective Measures Proposal (CMP) for DTSC review on February 2, 2007. DTSC issued comments on the CMP on April 30, 2007 and September 25, 2009.

DTSC hereby approves the Report provided the attached comments are addressed in future reports/fieldwork. Revisions to the Report are no longer necessary. Please contact DTSC to discuss future submittal.

If you have any questions regarding the project, please contact Ms. Ivy Osornio, Project Manager, at (714) 484-5433 or me at (714) 484-5368.

Sincerely,

Shahir Haddad, P.E.

Supervising Engineer

Schools Evaluation and Brownfields Cleanup Branch Brownfields and Environmental Restoration Program

rs/io/sh

Enclosure

CC:

(via e-mail)

Mr. Janaka Jayamaha Project Manager WorleyParsons

DTSC COMMENTS SOIL GAS INVESTIGATION REPORT ASSOCIATED PLATING COMPANY SANTA FE SPRINGS, CALIFORNIA

The following DTSC staff reviewed and provided comments herein to the Soil Gas Investigation Report (Report). Original comments from the DTSC Geological Services Unit (GSU) and Human and Ecological Risk Office (HERO) are available for review in DTSC project files. All questions regarding these comments should be directed to the Project Manager.

lvy Osornio

Project Manager
Schools Team – Cypress Office
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, California 90630
(714) 484-5433
iosornio@dtsc.ca.gov

GENERAL COMMENTS

- Per Section 8.0 of the Corrective Action Consent Agreement between APC and DTSC, the shallow zone remediation proposal should be submitted as a Corrective Measure Study (CMS). The CMS should include a summary of the proposed pilot study and include remedy design. The CMS is also put out for public review and comments prior to final DTSC approval and implementation.
- 2. The proposed SVE system will only address the shallow zone. Remediation of the shallow zone will ensure protection of current Site occupants; however, further investigation of the deeper zone (below 7 ft bgs) is required to address protection of groundwater. Investigation and potential remediation of the deeper zone may be deferred to a later date.

SPECIFIC COMMENTS

1. Section 6, Recommendations, page 13

"Installation of two SVE wells in the vicinity of SVM-9: one to a total depth of 7 feet bgs and the other installed to a depth of approximately 30 feet bgs to address residual VOC concentrations detected in soil samples collected during the installation of monitoring well MW-4."

Further investigation for soil gas and groundwater is required in the deeper zone (below the concrete slab at 7 ft bgs); at this stage, installation of a 30 ft bgs SVE well

DTSC Comments Soil Gas Investigation Report Associated Plating Company October 4, 2012 Page 2

is not necessary and may be deferred until the required deep investigation has been completed.

2. Section 6, Recommendations, page 13

"Operation of the SVE system until soil gas concentrations of VC and PCE in existing soil gas probes have been reduced to levels below the site-specific soil gas cleanup levels, SVE system influent concentrations reach asymptotic levels or the one year operational period allowed under the SCAQMD permit is reached."

Please clarify in future reports why system permit length is a deciding factor for termination of the SVE system. System termination should be performance based.

3. Table 3, Soil Gas VOC Analytical Results

The table identifies the site-specific screening level for vinyl chloride as $5.1 \mu g/L$; however the screening level is listed as $3.1 \mu g/L$ in Section 5. Please provide the correct screening value in future reports.

In addition, the table incorrectly lists the detected concentration of vinyl chloride at SVM-1 as 0.88 μ g/L. Please ensure the correct concentration is listed in future reports.

CY Jeng, Ph.D.

Staff Toxicologist
Department of Toxic Substances Control
Human and Ecological Risk Office
5796 Corporate Avenue
Cypress, California 90630
(714) 484-5359
cjeng@dtsc.ca.gov

GENERAL COMMENTS

- 1. The following VOCs were also detected in soil gas samples above the laboratory reporting limits and should be listed in Section 4.3.1 for completeness: ethylbenzene (0.62 ug/L @SVM-9) and toluene (0.12 ug/L @SVM-10).
- 2. The extent of VOC impacts in soil gas is not fully defined in the area between SVM-6 and SVM-7 as well as in the area between SVM-7 and SVM-8. Collection of additional data in these areas should be considered to evaluate if expansion of the proposed SVE system is necessary. Alternatively, the proposed SVE system should be demonstrated to have adequate radius of influence to cover these areas.

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3. As commented by HERO previously, a post-remedy risk assessment should be conducted to demonstrate the cumulative cancer risk and non-cancer hazard of all chemicals of concern (COCs), except for metals within background levels, and all relevant pathways are within DTSC's acceptable risk management levels for the site's designated land use. Specifically, exposures to non-VOCs in soil and VOCs in soil gas should be evaluated in the post-remedy risk assessment in accordance with current regulatory guidance. Please consult with HERO regarding evaluation of elevated TPH and arsenic detected in soil during the Facility Investigation.

SPECIFIC COMMENTS

1. Section 5, Discussion and Conclusions, page 12

HERO considers the proposed site-specific soil gas cleanup goals for VC and PCE adequate as the risk-based criteria for terminating operation of the SVE system, provided that a land use covenant is or will be in place to restrict the site to commercial/industrial land use only. HERO refers to DTSC project management regarding the other criteria listed on Page 13 for terminating operation of the SVE system.

2. Section 6, Recommendations, page13

Collection of post-remediation soil gas samples should wait until residual VOCs in soil and soil gas matrices re-establish equilibrium following shutdown of the SVE system. For the soil types (silty clay and clayey silt) observed at the site, a waiting period of one to three months is typically needed. HERO recommends consulting with DTSC regarding the timing for collecting post-remediation soil gas samples.

Jose Marcos, P.G.

Engineering Geologist
Department of Toxic Substances Control
Geological Services Unit
5796 Corporate Avenue
Cypress, California 90630
(714) 484-5492
imarcos@dtsc.ca.gov

COMMENTS

See attached memo.





Department of Toxic Substances Control

Deborah O, Raphael, Director 5796 Corporate Avenue Cypress, California 90630



TO:

lw Osornio

Project Manager Cleanup Program

FROM:

Jose Marcos, P.G. -

Engineering Geologist

Cypress Geological Services Unit

DATE:

October 2, 2012

SUBJECT:

SOIL GAS INVESTIGATION REPORT

ASSOCIATED PLATING COMPANY, 9636 ANN STREET

SANTA FE SPRINGS, CALIFORNIA

PCA: 22120 Site: 400891-48 WR: 20014248

The Department of Toxic Substances Control (DTSC) Geological Services Branch (GSB) was requested to review the document titled "Soil Gas Investigation Report" (Report) for the Associated Plating Company. The document was prepared by Worley Parsons and dated September 4, 2012.

Associated Plating operates a plating shop for metallic components on approximately 1.25 acres of land in the City of Santa Fe Springs. Previous subsurface investigations have detected significant concentrations of volatile organic compounds (VOCs) in soil, soil gas and groundwater.

Based on a critical-flaw review of the document and discussions with the DTSC project team, the following comments are noted:

Comments:

1. Based on the most recent soil gas sampling event, the extent of VOCs in soil gas to the east (employee parking lot and unpaved land) are not delineated, however, previous soil vapor samples may provide valuable information regarding the extent of VOCs in this area, as well as other adjacent areas. Please also refer to the DTSC toxicologist comments on additional potential data gaps. GSB recommends collecting additional soil vapor data to delineate the extent of VOCs for use in the design of the soil vapor extraction (SVE) system (i.e., expansion of SVE or optimizing SVE well locations and design).

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Additionally, VOCs in soil gas to the south (offsite) are not yet delineated. Additional offsite soil vapor characterization may be required in future phases of the project.

- 2. A DTSC engineer should review the proposed SVE system and subsequent design details. Please see the DTSC toxicologist comments regarding details on the post-remediation risk evaluation for all site constituents of concern.
- 3. The high levels of vinyl chloride (maximum 1400 ug/L) in shallow soil gas, and historic vinyl chloride detected in soil at depth, indicate that the site is a likely source of vinyl chloride previously detected in groundwater. In addition, the SVM-11 boring log indicate the presence of 2-feet of water in the borehole, this can serve as a driving force for the continued migration of site constituents of concern in the vadose zone to depth, including to groundwater.

DTSC reiterates the need to characterize site constituents of concern in the deeper vadose zone, evaluate the threat to groundwater from existing vadose zone contamination and, characterize groundwater contamination (including towards the southwest portion of the site).

All comments and recommendations made in this document are site-specific and should not be considered as a general policy decision applicable to other sites. If you have any questions, you may contact me at (714) 484-5492 or jose.marcos@dtsc.ca.gov.

Reviewer: Greg Neal, P.G.

cc: Alfredo Zanoria, C.E.G., C.H.G.